

130-6-23/36

AUTHORS: Votinov, M.P., Kuvshinskiy, Ye.V., and Sul'zlenko, L.L.

TITLE: A Device for Studying Thermoelastic Properties of Adiabatically-stressed Rubber (Ustanovka dlya izucheniya termouprugikh svoystv rezin v adiabaticheskikh usloviyakh rastyazheniya)

PERIODICAL: Pribory i Tekhnika Eksperimenta, 1957, No.6,
pp. 92 - 94 (USSR).

ABSTRACT: Two devices are described which can be used to study thermoelastic properties and "crystallisation" processes in resins using the method of adiabatic extension in the temperature range -20 to +100 °C and at different speeds of deformation. The first apparatus is shown in Fig.1 and the second in Fig.2. The aim of the present work was to eliminate, as far as possible, heat losses, and to increase the accuracy of temperature measurement during the process of deformation. It was established that thermal losses are mainly due to convection. They are particularly large at low speeds of deformation, i.e. when the duration of the process is up to 100 to 125 sec. Heat losses in the first device were eliminated by using a vacuum chamber evacuated to a pressure of 10^{-2} to 10^{-3} mm Hg. The elimination of heat losses meant that specimens with larger cross-sections could be used (100 mm^2). Manganin-constantan

Card1/3

120-6-23/36

A Device for Studying Thermoelastic Properties of Adiabatically-stressed Rubber.

SUBMITTED: April 24, 1957

AVAILABLE: Library of Congress
Card 3/3

Thermoelastic Phenomena in Rubbers out of Natural Caoutchous at 57-10-16/33
Cyclic Deformation.

ments without additional measures. It is determined that the mistakes in the quantitative analysis of the processes in rubbers in the case of adiabatic extension are connected with the ignorance of the real amount of the specific heat and with the inexactness in the determination of the prolongation in the case of shrinking which is especially essential. There are 3 figures and 5 Slavic references.

ASSOCIATION: Polytechnical Institute imeni Kalinin M. I., Leningrad (Politekhnicheskiy institut imeni M. I. Kalinina, Leningrad)

SUBMITTED: April 18, 1957

AVAILABLE: Library of Congress.

Card 2/2

A ACC NR: 1 9220-66 ENT(m)/T/EMP(t)/EMP(b)		LIP(c)	JD/JB/DJ
SOURCE CODE: UR/0286/65/000/022/0043/0043			
INVENTOR: Sul'zhenko, N. K.; Barannik, V. P.; Polyakov, V. S.; Dubinkin, V. P.; Semenov, V. P.			
ORG: none			
TITLE: Method for preparing lubricating greases for parts from titanium and titanium based alloys. Class 23, No. 176352			
SOURCE: Byulleten' izobretenij i tovarnykh znakov, no. 22, 1965, 43			
TOPIC TAGS: titanium, titanium alloy, lubrication, halogenated organic compound, grease, paraffin wax, hydrocarbon, antifriction metal, anticorrosion additive, chlorinated paraffin			
ABSTRACT: An Author Certificate has been issued for a preparative method for lubricating greases for titanium and titanium-alloy parts. The grease is based on halogenated hydrocarbons. To enhance the antifriction properties of titanium and the anticorrosive properties of the grease, a chlorinated paraffin is thickened with solid chlorine-containing organic compounds, such as chlorinated poly(vinyl chloride) resin, hexachlorobenzene, or 70% chlorinated paraffin [sic]. [EN]			
SUB CODE: 11/ Card 1/1		SUBM DATE: 13Jan64/ ATD PRESS: 4158	UDC: 621.893.002.235;546.821

ACC NR: AP6029040

(A)

SOURCE CODE: UR/0413/66/000/014/0056/0056

INVENTOR: Sul'zhenko, N. K.; Barannik, V. P.; Polyakov, V. S.; Semenov, V. P.;
Dubinkin, V. P.

ORG: none

TITLE: Preparative method for a lubricant. Class 23, No. 183863

SOURCE: Izobret prom obraz tov zn, no. 14, 1966, 56

TOPIC TAGS: lubricant, titanium, titanium alloy, ~~methylene iodide~~, ~~iodine~~, iodineABSTRACT: An Author Certificate has been issued for a preparative method for a methylene iodide-base lubricant suitable for parts made of titanium and its alloys. To lower the friction coefficient, iodine, iodoform, or a mixture of the two is dissolved in the methylene iodide. [4] [SM]

SUB CODE: 11/ SUBM DATE: 05Jul62/ ATD PRESS: 506 /

Card 1/1

UDC: 621.892.84

AUTHOR: Sul'zhenko, P. G., Engr Col

sov/86-58-11-29/37

TITLE: Recommendations That Cannot Be Agreed To (Rekomendatsii, s kotorymi
nel'zya soglasit'sya)

PERIODICAL: Vestnik vozdushnogo flota, 1958, Nr 11, p 85 (USSR)

ABSTRACT: The author states that one cannot fully agree with the recommendations made by Engr LtCol A.Z. Yevilevich in his article "Decontamination of Water Under Field Conditions" (the article was published in issue Nr 7 of this periodical in 1958) and suggests that another method of decontamination of water from radioactive particles should be used under field conditions. According to the author's method, black earth, clay, or podsol can be used for this purpose. To increase the filtration capacity, some fluvial sand should be added. First, the soil and sand should be dried, then the dried components are sifted through strainers (size of grains: 1-3 mm), and finally, they are mixed in the following proportions: one volume of sand to two volumes of soil. A wooden drainage inset is placed in a barrel with two faucets at the bottom. A perforated metal or wooden disk is placed on the top of the inset. Then a 10 cm layer of gravel ($D=2.5 - 15$ mm) is poured over the disk and on top of that layer comes the soil-sand mixture (a 40 cm layer). The filtration speed

Card 1/2

S/601/60/000/011/007/014
D207/D304

AUTHORS:

Gridnev, V. N., Meshkov, Yu. Ya., and
Sul'zhenko, V. K.

TITLE:

Electrical tempering of chromium steels

SOURCE:

Akademiya nauk Ukrayins'koyi RSR. Instytut
metalofizyky. Sbornik nauchnykh rabot. no.
11. 1960. Voprosy fiziki metallov i metollo-
vedeniya, 87-93 ✓

TEXT: The authors report a study of the changes in structure and mechanical properties produced by electrical tempering of chromium steels 38XA (38KhA) and Wx6 (ShKh6). The samples (130 mm long wires of 1.8 - 2.4 diameter) were first quenched from temperatures which ensured dissolution of carbides and were then cooled in liquid nitrogen. The samples were next tempered by passing a 50 c/s current through them so that the temperature rose at 900 - 1100 C/sec. The voltage across the sample, the

Card 1/3

SUL'ZHENKO, Yu.F. (Kiyev)

Sinus condenser as a converter of angular displacement. Avto-
matyka 9 no.4:57-64 '64. (MIRA 17:8)

SUL'ZHENKO, Ye.M. [Sul'zhenko, IE.M.]

Iosif Iosifovich Kosonohov -- the scientist and pedagogue.
Visnyk Kyiv.un.no.2.Ser.fiz.ta khim. no.1:113-123 '59.

(MIRA 14:8)

(Kosonohov, Iosyf Iosyfovych, 1866-1922)

SUL'ZHENKO, Ye. M. (Kiyev)

Ninetieth birthday of Professor S.P. Slesarevskii. Fiz. v shkole 19
no.1:124 Ja-F '59. (MIRA 12:3)
(Slesarevskii, Sergei Petrovich, 1868-)

SUM, Jan

Use of aluminum as roofing material. Poz stavby 11 no.1:41-42 '63.

1. Komunalni sluzby, Kromeriz.

APPROVED FOR RELEASE: 08/26/2000

CIA-RDP86-00513R001653910018-7
RUMANIA

SUFESCU, Paraschiva, MD; COCORA, Despina; SUMA, S.

Department of Food Hygiene, Institute of Medicine and Pharmacy,
Bucharest (Catedra de igiena alimentatiei, I.M.F., Bucuresti) -
(for all)

Bucharest, Igiena, No 4, Jul-Aug 63, pp 327-334

"Expenditure of Energy and the Nutritive Requirements of Construction
workers."

✓
GAVRILOIU, A., DOGRIN; MIHAI, I., MD; SUDULEA, Paraschiva, MD;
SOMA, S., MD; COCINA, Dragica, MD.

Section of Labor Physiology and Professional Diseases of the
Institute of Hygiene and Labor Protection of the Romanian
People's Republic, Bucharest, in collaboration with the
Department of Food Hygiene, Institute of Medicine and
Pharmacy, Bucharest (Secția de fizionomie a muncii și boli
profesionale a Institutului de igienă și protecția muncii
al R.P.R., București, în colaborare cu Catedra de igienă
alimentară, I. I.F., București) - (for all)

Bucharest, Igiena, No 6, Nov-Dec 63, pp 493-501

"Some Aspects of Labor physiology in Workers on the Building
Sites of Apartment houses."

(5)

LUPKIN, D.M., kand.tekhn.nauk; RUDAKOV, B.V., inzh.; SEMENOV, N.P., inzh.;
SUMAKOV, B.A., inzh.; KHEYFETS, L.A., inzh.

Main line electric locomotive with a synchronous motor and
hydraulic transmission. [Trudy] LIIZHT no.193:77-92
'62.
(MIRA 15:12)

1. Leningradskiy institut inzhenerov zheleznodorozhnogo
transporta (for Lupkin, Rudakov, Semenov, Sumakov). 2. Luganskiy
teplovozostroitel'nyy zavod (for Kheyfits).
(Electric locomotives)

ACC NR: AP6026342

SOURCE CODE: UR/0144/66/000/C07/3736/3742

AUTHOR: Rudakov, B. V. (Engineer); Semenov, N. P. (Senior Engineer); Sumakov, B. A.
(Deceased; Engineer; Group Leader)

ORG: Electrical Traction Problem Laboratory, Electrical Machinery Department,
Leningrad Institute for Railroad Transportation Engineers (Problemnaya laboratoriya
elektricheskoy tyagi pri kafedrye elektricheskikh mashin Leningradskogo instituta
inzhenerov zheleznozdrozhnogo transporta)

TITLE: Questions concerned with research involving a dual frequency synchronous
generator

SOURCE: IVUZ. Elektromekhanika, no. 7, 1966, 736-742

TOPIC TAGS: electric generator unit, frequency control, switching circuit, electric
motor

ABSTRACT: A production model of a synchronous generator with stepped-up frequency,
type ChS-9/2, was used to build an experimental, dual-frequency generator so that
50 cycle and 200 cycle voltages, depending on the manner in which stator and rotor
windings were connected, could be obtained while retaining generator speed constant.
The generator is similar to a variable speed, pole switching synchronous motor. Elec-
trical connections for rotor and stator are shown, as are various of the data de-
veloped during the experiments. Orig. art. has: 4 figures and 1 table.

SUB CODE: 09/SUBM DATE: 27May64/ORIG REF: C03

10.31.1.00.621.0.0.5

ACC NR: AR6036106

(A, N)

SOURCE CODE: UR/0365/66/002/006/0628/0635

AUTHOR: Knyachova, V. M.; Sumakova, I. S.; Kolotyrkin, Ya. M.; Krughkovskaya, A. A.

ORG: Physicochemical Scientific Research Institute im. L. Ya. Karpov (Nauchno-issledovatel'skiy fiziko-khimicheskiy institut)

TITLE: Anodic behavior of chrome-nickel steels stabilized with titanium

SOURCE: Zashchita metallov, v. 2, no. 6, 1966, 628-635

TOPIC TAGS: chromium steel alloy, nickel containing alloy, titanium, electrochemistry

ABSTRACT: The experiments were carried out on samples of Type Kh18N9T steel in a 1 N solution of sulfuric acid, at 70°, in an atmosphere of argon. In general, the polarization curves were taken for freshly purified samples which had not been subjected to previous cathode activation. In addition to the electrochemical measurements, the solutions were analyzed colorimetrically for Fe, Cr, and Ti, after the samples had been held at the given voltages. The sensitivity of the determinations was, respectively, 5×10^{-7} , 5×10^{-8} , and 2×10^{-7} grams/ml. It was concluded from the experimental data that titanium carbide, regardless of existing literature indications, cannot be recommended as an electrochemically stable anode. It follows also from the results of the present investigation that in the determination of the steady state anode potential curves, it is not necessary to take into account the

UDC: 669.15-194:669.24'27:541.138.2

Card 1/2

KNYAZHEVA, V.M.; VEDENEYEVA, M.A.; SAID YESEL'DIN KHALIL'; KOLOTYRKIN, Ya.M.;
Prinimala uchastiye; SUMAKOVA, I.S., studentka

Electrochemical study of the effect of the content of carbon, titanium,
and manganese on the corrosion resistance of chromium-nickel-manganese
steels. Zashch. met. 1 no.5:465-472 S-0 '65. (MIRA 18:9)

1. Nauchno-issledovatel'skiy fiziko-khimicheskiy institut imeni
L.Ya. Karpova, Moskva (for all except Sumakova). 2. Moskovskiy
institut stali i splavov (for L. Karpova).

MAZHAROV, P.P.; SUMAKOVA, N.S.

How to establish a small-basin snow-water irrigation system. Zemledelie 6 no.8:29-32 Ag '58. (MIRA 12:11)
(Irrigation)

AUTHOR: S. Sumakova, N., the Youngest Scientific Collaborator of the Agronomic Station imeni Vil'yams 504/29-58-7-21/23

TITLE: Microscopic Lagoons (Mikroskopicheskiye limany)

PERIODICAL: Tekhnika molodezhi, 1958, Nr 7, pp. 36-36 (USSR)

ABSTRACT: In this article the author describes a new method of cultivating the ground during the autumnal plowing of the soil, which makes it possible to use the melted snow and/or ice for the seed. Calculations carried out by scientists showed that only 25-30% of one year's precipitation is actually utilized for this purpose. The remainder evaporates, is drained off, and is used up by the weeds. This is the reason why cultivated plants, especially in the steppe regions, frequently suffer from lack of water. If it were possible to utilize at least 60% of precipitation for the seed, the yield could be doubled. Doctor of Agricultural Sciences P.P. Mazharov worked out a new method of utilizing melted snow already in 1946-1947, and this method is being employed already by numerous Kolkhozes and Sovkhozes; it is, however, not yet perfect because it is very difficult to plow by this method in the fall; in some cases it is even impossible. Doctor Mazharov and the

Card 1/3

Microscopic Lagoons

SOV/29-58-7-21/23

author of this article arrived at the conclusion that it is absolutely necessary that melted snow be uniformly distributed over the entire area of the field. This is brought about by dividing the soil by plowing into cells of uniform shape and size from which the water is not able to drain off but merely to penetrate into the soil. In this way the so-called microscopic "lagoons" (see illustration) were created by means of several types of machines constructed specially for this purpose. Two of six devices were found to be adequate (FM - 2) and (RM). The size of such a micro-lagoon after passage of the aggregate "RM" amounts to 10 m². Larger dimensions are not advisable because in the case of a steep incline of the soil the water might drain off more easily. In the spring of 1957 the depth of melted snow in these micro-lagoons was measured at the test station of Novo-Annenskiy in Stalingrad oblast. It was found that about 700 to 1300 m³ of water had accumulated per ha. On the neighboring area, which had been plowed in the usual way, there was no water at all. Because of the great drought of 1957 the yield of summer wheat in the Novo-Annenskiy district 5.8 hundredweights per ha. In the same district the yield obtained by means of micro-lagoons amounted to 9.68 and 10.12 hundredweights per ha. There are 3 figures.

Card 2/3

Microscopic Lagoons

Sc. 29-58-7-21/23

1. Agriculture--Moisture factors 2. Soils--Processing 3. Snow--Appli-
cations 4. Soils--Test results

Card 3/3

SILAK, S.

Preparation for the relay race to mark the birthday of the
President Tito. p. 100.

Achievements of the radio organizations in Slovenia. p. 101.
(Radiosatir, Vol. 11, no. 4, Apr. 1957. Belgrade, Yugoslavia)

See: Monthly List of East European Accessions. (EEL) LC, Vol. 6, No. 7,
July 1957. Incl.

DORIC, Jelena J.; SUMANAC, Olivera M.

Volumetric determination of zinc. Glas Hem dr 25/26
no.5/7:405-409 '60/'61.

1. Hemijski institut, Beograd.

SUMANEYEV, N.N.

Use of hydrodynamic gears in the drives of core drills. Razved.
i okh.nedr. 28 no.11:31-33 N '62. (MIRA 15:12)

1. Zapadno-Sibirskoye geologicheskoye upravleniye.
(Core drilling—Equipment and supplies)
(Gearing)

SCHLESER, V.V.; GOSTFUNKO, N.P.; FILINOV, N.I.

Efficient round-trip length in diamond drilling. Razved. i ekh.
nadr. № 3:35-37 MS '64 (MIRA 18:1)

L. Tsi'eskaya kompleksnaya tomograficheskaya ekspeditsiya TSen-
tral'nogo nauchno-issledovatel'skogo gornorazvitiya chernojgo in-
stituta tovzemykh, redkikh i blagorodnykh metallov.

SUMANEYEV, P., inzh.

Inventor Zinovii Zaitsev. Izobr.i rats. no.10:12 O '59.
(MIRA 13:2)

1. Predsedatel' soveta Vsesoyuznogo obshchestva izobretateley
i ratsionalizatorov zavoda "Elektroizmeritel'," g.Zhitomir.
(Zhitomir--Screw cutting)

СУМАНЬЕВ, Т. И.

Sheep - Diseases

Tincture of iodine in duodenal obstruction in lambs. Veterinaria, 29 No. 2, 1952.

9. Monthly List of Russian Accessions, Library of Congress, _____ 1953, Uncl.

SUMANIEVA, G.

Idlers from the rifle club. Voen.znam. 31 no.9:13 S '55. (MIRA 9:2)

1.Chlen strelkovo-sportivnogo kluba, g. Molotov.
(Shooting)

SUMANEYeva, Ye.A.

Use of Bykman's medium on casein hydrolysate for the analysis of
water. Lab.delo 8 [i.e.9] no.1:50-51 Ja '63. (MIRA 16:5)

1. Laboratoriya Dorozhnoy sanitarno-epidemiologicheskoy stantsii
(nachal'nik M.M.Ferdinand) Kuybyshevskoy zheleznoy dorogi,
Kuybyshev.
(WATER—MICROBIOLOGY) (BACTERIOLOGY—CULTURES AND CULTURE MEDIA)

PIVOVAROV, A.T.; MIN'KOVSKIY, Ya.I.; SUMANOV, V.T.

Determining the optimal temperature of catalytic cracking.
Khim. i tekhn. topl. i masel 9 no.9;8-10 S '64.
(MIRA 17:10)
1. Groznyenskiy filial Nauchno-issledovatel'skogo i proyektchnogo
instituta po kompleksnoy avtomatizatsii proizvodstvennykh
processov v neftyanoy i khimicheskoy promyshlennosti.

SECRET

origin of "Ullman, J.M." Tel. info. 12 no. 3, 1958.

9. Monthly List of Russian Accessions, Library of Congress, June 1958, Uncl.
2

1. SUMARV, Ye. Ya.
2. USSR (600)
4. Skalozubov, Nikolai Lukich
7. N. L. Skalozubov's activity in agronomy. Sov. agron. 11 no. 1, 1953.

9. Monthly List of Russian Accessions, Library of Congress, March 1953. Unclassified.

SHVARTZ, V. Ya.

GROSS-DE

Use of wild grain cults. Sel. i sem. 20, No. 3, 1953.

Monthly List of Russian Accessions, Library of Congress, June 1953. Uncl.

MAL'TSEV, Terentiy Semenovich, laureat Stalinskoy premii; GLUBOV, S.,
redaktor; SUMANOV, Ye., redaktor; BELYAKOV, M., tekhnicheskiy
redaktor

[Through experience to knowledge] Cherez opyt - v nauku. Izd. 2-e.
ispr. i dop. Kurgan, izd-vo "Krasnyi Kurgan," 1955. 471 p.
(Agriculture) (MIRA 9:9)

185T7
USSR/Chemistry - Wolfram

Mar 51

"Thermodynamics of Rare Metals: III. Equilibrium of Iron Wolframate With Hydrogen," T. N. Rezukhina, Yu. P. Sumanov, Ya. I. Gerasimov, Inst Chem, Moscow State U imeni M. V. Lomonosov

"Zhar Fiz Khim" Vol XXV, No 3, pp 305-311

X-ray anal of products of reduction with H₂ of Fe₂O₃ + WO₂ mixts with different Fe:W ratios showed at 350-1,100°C only one intermetallic compd, Fe₇W₆, is formed. Measured consts of reduction of FeWO₄ with H₂ and set up eq for

185T7

USSR/Chemistry - Wolfram (Contd)

Mar 51

equil const. Calcd free energy at 850-1150° and heat effect of reaction 1/2Fe₇W₆ + 1/7W + 2O₂ → FeWO₄.

185T7

SUMANOVAC, Z.

Medicinska knjiga i zavod za izdavaštvo znanstveno-tekničkih publikacija

Conservative therapy of trigeminal neuralgia with novocaine block.
Acta chir. iugosl. 1 no.1-2:118-127 1954.

1. Kirurska klinika Medicinskog fakulteta u Zagrebu (Predstojnik
prof. dr. J.Budisavljević)

(TRIGEMINAL NEURALGIA, ther.

*basal block with procaine)

(PROCAINE, ther. use

*trigeminal neuralgia, basal block)

(ANESTHESIA, REGIONAL, ther. use

*basal block in trigeminal neuralgia, with procaine)

SUMANOVAC, Z.

The treatment of ulcerus cruris by a skin circumcision method.
Acta chir.iugosl. 2 no.2-3 246-253 1955.

1. Kirurski odjel Opce bolnice u Virovitici (Sef dr. Zvonimir
Sumanovac)

(LEG, ulcers

varicose ulcer, surg., technic (Ser))
(ULCER

leg, surg., technic (Ser))

(VARICOSE VEINS, ulcer
surg., technic (Ser))

SUMANOVAC, Z.

Case of isolated lymphogramuloma of the stomach. Acta chir.
iugosl. 3 no.3:285-290 1956.

1. Kirurski odjel Opce bolnice, Zajceva ulica u Zagrebu
(predstojnik prim. dr. B. Vitanus).

(HODGKIN'S DISEASE,

stomach (Ser))

(STOMACH NEOPLASMS, case reports,
Hodgkin's dis. (Ser))

SUMANOVAC, Z.

Branhialne fistule. Acta chir. iugosl. 3 no.4:385-390
1956.

1. Kirurski odjel Opće bolnice, Zajceva ulica u Zagrebu (sef
prim. dr. Branko Vittaus).
(BRANCHIAL REGION, fistula
case reports (Ser))

YUGOSLAVIA / Chemical Technology. Chemical Products and Their Applications. Pharmaceuticals. Vitamins. Antibiotics.

Abs Jour: Ref Zhur-Khimiya, 1959, No 4, 12840.

Author : Kleflin, Zdenka; Sumanovic, Klara.

Inst : Not given.

Title : Determination of Histaphene Maleinate Hexabarbital and Ethyl-p-aminobenzoate in a Mixture with Scopolamine Bromhydrate.

Orig Pub: Acta pharmac. jugosl., 1956, 6, No 3-4, 191-196.

Abstract: Determination is described of ethyl-p-aminobenzoate (I), histaphene maleinate (II) and hexabarbital (III) in a mixture with scopolamine bromhydrate ("aerozan" dragee). For determination of I, 1.5 g of the dragee is extracted with hot ether (25, 20, 15, 2 X 10 ml); the extract is filtered; the ether

Card 1/3

66

YUGOSLAVIA / Chemical Technology. Chemical Products and Their Applications. Pharmaceuticals. Vitamins. Antibiotics.

Abs Jour: Ref Zhur-Khimiya, 1959, No 4, 12849.

Abstract: is evaporated; the residue is dissolved in 30 ml of 15% HCl; an additional 15 ml of concentrated HCl is added, chilled with ice; ice is added and titrated with a 0.1 n solution of NaNO₂. To determine I in a pure preparation, titrated 0.1 n is used with a HCIO₄ solution in a medium of icy CH₃COOH. To determine II, the residue after extraction of the dragee by ether is extracted with hot absolute CH₃OH (5 X 5 ml), filtrated; 80 ml C₆H₆ is added to the filtrate and the solution is titrated with 0.1 n CH₃ONa in the presence of thymol blue. To determine III, about 10 g of a dragee batch is extracted with ether (25, 2 X 20,

Card 2/3

YUGOSLAVIA/Chemical Technology. Chemical Products and Their Applications. Pharmaceuticals. Vitamins. Antibiotics.

H

Abs Jour: Ref Zhur-Khim., No 8, 1959, 28579.

Author : Klefelin, G. and Sumanovic, K.

Inst :

Title : Application of the Potter-Eschrarn Method to the Determination of Sugar in Medicinal Syrups.

Orig Pub: Farmac Glasnik, 13, No 3-4, 95-103 (1957) (in Serbo-Croat with an English summary)

Abstract: A complexometric method has been developed for the determination of sugar in medicinal syrups. In the place of the classic Fehling solution, an alkaline solution of Cu complexonate is used, which is reduced to Cu₂O by boiling for 10 min. The Cu₂O is

Card : 1/2

216

YUGOSLAVIA/Chemical Technology. Chemical Products and Their
Applications. Pharmaceuticals. Vitamins. Anti-
biotics.

H

Abs Jour: Ref Zhur-Khim., No 8, 1959, 28579.

filtered, washed with water, and dissolved in HNO_3 ; the solution obtained is neutralized with 1N NH_4OH and titrated with a 0.02 N solution of complexone in the presence of murexide as indicator. The complexometric method offers a number of advantages over the standard methods: the complexonate solution is more stable and less alkaline than Fehling solution and has a constant pH; the filtered Cu_2O is dissolved and titrated, whereas previously it was determined directly in the mother liquor. The utilization of a special bag-type filter reduces losses which are unavoidable in the transferring of the solution from one vessel to another. The method is rapid, simple,

Card : 2/3

S: M-A-114, A

Country	: YUGOSLAVIA	H-17
Category	: Chemical Technology. Pharmaceuticals. Vitamins. Antibiotics	
Abs. Jour	: Ref Zhur-Khimiya, No 14, 1959, No 50750	
Author	: Kleflin, Z.; Sumanovic, K.	
Institute	: -	
Title	: Determination of Individual Components in Candied "Complex B" Preparation	
Orig Pub.	: Croat. chem. acta, 1958, 30, 181-187	
Abstract	: A method of determination of individual complex B vitamins in candied preparation is described. The photocolorimetric determination of anervine (I) is based on its ability to form in alkaline medium with the diazotized n-NH ₂ -C ₆ H ₄ -COCH ₃ a red product, which is separated from the colored products of other complex B vitamins by extraction with xylol. Riboflavin is determined photocolorimetrically	
Card:	1/2	

KATUNARIC, D.; SUMANOVIC, Z.; SKARICA, R.

A technic for the percutaneous abdominal aortography. Acta chir.
Iugosl. 7(8) no.3:247-252 '60.

1. Zavod za rentgenologiju (predstojnik: prof. dr. S.Kadrnka) i
Kirurski odjel (predstojnik dr. D.Riessner) Opce bolnice "Dr.
M.Stojanovic" u Zagrebu.
(ANGIOGRAPHY)

CHIGURIAYEVA, A.A.; SUMAREVA, V.N.

Materials on the study of the Akchagyl vegetation in the south-east.
Uch. zap. Sar. un. 64:3-34
(MIRA 13:9)
(Russia, Southern—Paleobotany, Stratigraphic)

SPIROKA, A. I.

35448. Sanitarno-gigiyenicheskaya otsenka pochvy sela. Gigiya i sanitariya, 1949, №. 11, s. 51-52.

Letopis' Zhurnal'nykh Statey, Vol. 48, Moskava, 1949

SUMAROKOV, A. A.

"The Problem of the Effect of Interrupted Therapeutic Sleep
on the Course of Experimental Staphylococcus Infection." Cand Med
Sci, Odessa State Medical Inst, Odessa, 1954. (RZhBiol, No 5, Mar 55)

SO: Sum. No. 670, 29 Sep 55—Survey of Scientific and Technical
Dissertations Defended at USSR Higher Educational Institutions (15)

SUMAROKOV, A.A.

Role of interrupted drug-induced sleep in the development and
course of experimental septic Staphylococcus infections in white
mice. Zhur.mikrabiol. epid. i immun. no.8:105-107 Ag '55(MLRA 8:11)
(STAPHYLOCOCCUS) (SLEEP)

SUMAROKOV, A.A.

Effect of drug-induced sleep on phagocytic reaction and on the cellular composition of abdominal exudates in white mice. Zhur. mikrobiol.epid.i immun. no.5:62-63 My '55. (MLRA 8:7)

1. Iz kafedry mikrobiologii (zav.-dotsent. T.I.Ivanova) Stanislavskogo meditsinskogo instituta (dir.-dotsent S.S.Lavrik).

(SLEEP, effects,

on exudate cellular composition & phagocytosis in white mice)

(EXUDATES AND TRANSUDATES,

eff. of sleep on cellular composition & phagocytosis in white mice)

(PHAGOCYTOSIS,

eff. of sleep on cellular composition & phagocytosis in exudates in white mice)

SUMAROKOV, A.A.

Effect of medicinal on antibody production and on complement in
the blood of experimental animals during vaccination. Zhur.
mikrobiol. epid. i immun. no.12:78 D '55.

(MLRA 9:5)

1. Is kafedry mikrobiologii (zav.-dotsent T.I. Ivanova)
Stanislavskogo meditsinskogo instituta (dir.-dotsent G.A. Babenko)
(VACCINES AND VACCINATION,
eff. of barbital sodium on antibody form. & complement
in vaccinated animals)
(BARBITURATES, effects,
on antibody form. & complement in vaccinated animals)

SUMAROKOV, A.A.

Effect of caffeine and strychnine on the formation of postvaccinal immunity. Zhur. mikrobiol. epid. i immun 28 no.2:132-133 F '57
(MLRA 10:4)

1. Iz Stanislavskogo meditsinskogo instituta.
(CAFFEINE--PHYSIOLOGICAL EFFECT) (STRYCHNINE--PHYSIOLOGICAL EFFECT)
(IMMUNITY)

MAMAYEVA, Ye.A.; SUMAROKOV, A.A.; STAROVEROVA, A.G.; BONDARENKO, M.P.

Study of the immunological effectiveness of whooping cough monovaccine. Trudy IEMG no.8:135-145 '61.

Study of the immunological effectiveness of whooping cough-diphtheria vaccine as compared with data obtained in the immunization of children with whooping cough monovaccine. Report No.2. Trudy IEMG no.8:182-194 '61. (MIRA 17:2)

MYASNENKO, A.M.; SUMAROKOV, A.A.; BIRGER, M.O.; SHANDALOV, B.Ya.

Bacteriological laboratories in the Russian Socialist Federal Soviet Republic and the organization of their work. Zdrav. Ros. Feder. 6 no.4:8-11 Ap '62. (MIRA 15:4)

(BACTERIOLOGICAL LABORATORIES)

SUMAROKOV, A.V.; MIKHAYLOV, A.A. (Moskva)

"Auscultative symptomatology of acquired *witiae aordis*" by
I.A. Kassirskii, G.I. Kassirskii. Reviewed by A.V. Sumarokov,
A.A. Mikhaylov. Sov.med. 26 no.12:127-128 D '62. (MIRA 16:2)
(HEART—DISEASES) (AUSCULTATION)
(KASSIRSKII, I.A.) (KASSIRSKII, G.I.)

MASTYUKOVA, Yu.N.; KHESIN, Ya.Ye.; SARAYEVA, N.T.; SUMAROKOV, A.A.;
PORUELL,L.A.

Nature of intracellular inclusions in measles. Vop. virus. 8
no.1:27-31 Ja-F'63. (MIRA 16:6)

1. Moskovskiy nauchno-issledovatel'skiy institut epidemi-
logii i mikrobiologii i Moskovskiy nauchno-issledovatel'skiy
institut virusnykh preparatov.
(MEASLES VIRUSES) (PATHOLOGY, CELLULAR)

MAMAYEVA, Ye.A.; SUMAROKOV, A.S.; DONDARENKO, M.P.; GALADZHEVA, Ye.S.

Comparative study of immunological changes in revaccination with pertussis and pertussis-diphtheria vaccine. Zhur. mikrobiol., epid. i immun. 40 no.9:10-14 . '63. (MIRA 17.5)

1. Iz Moskovskogo instituta epidemiologii i mikrobiologii.

IGNAT'YEVA, G.V., SUMAROKOV, A.A.; LEPPNEVA, A.G.; ALAFUZOVA, S.V.

Immunological effectiveness of pertussis-diphtheria-tetanus
vaccine. Zhur. mikrobiol., epid. i imun. 40 no.10:58-62 O '63.
(MIRA 17:6)

1. Iz Moskovskogo instituta epidemiologii i mikrobiologii i
sanitarno-epidemiologicheskoy stantsii Leningradskogo rayona
Moskvy.

MASLIVIKOVA, I.I.N.; SUMAROKOV, A.A.

Mechanism of antimalarial immunity. Report No.3. The role of antibodies in antimalarial immunity. Experiments in vitro. Vop. virus., 1962, No. 13, p. 242. MIA-1962

... Moskovskiy nauchno-issledovatel'skiy institut epidemiologii i mikrobiologii.

SUMAROKOV, A.A.; KULIKOVA, Yu.M.

Study of the action of antipertussis gamma globulin on the formation
of cellular reactions in experimental pertussis infection. Zhur.
mikrobiol., epid. i immun. 41 no.4:13-17 Ap '64.

(MIRA 18:4)

I. Moskovskiy institut epidemiologii i mikrobiologii.

SUMARCKOV, A.A.; MAMAYEVA, Ye.A.; KULIKOVA, Yu.M.; STAROVEROVA, A.G.;
BONDARENKO, M.P.

Opsonizing and bactericidal properties of sera from children
vaccinated with pertussis and pertussis-diphtheria vaccines.
Zhur. mikrobiol., epid. i immun. 41 no.9:143-144 S '64.
(MIRA 18:4)

l. Moskovskiy institut epidemiologii i mikrobiologii.

SUMAROKOV, A.A.; KULIKOVA, Yu.M.

Effect of passive immunization on the sensitizing action of
Hemophilus pertussis. Report No.2: Formation of increased
sensitivity to heterologous antigens. Zhur. mikrobiol., epid.
i immun. 42 no.6:56-60 '65. (MIRA 18:9)

1. Moskovskiy institut epidemiologii i mikrobiologii.

SUDARIKOV, A....

Antigenic variants of *Hemophilus pertussis*; a review. Zhur. mikrobiol.,
epid. i immun. 42 no.1:72-76 Ja '65.

(MIRA 18:6)

1. Moskovskiy institut epidemiologii i mikrobiologii.

SUMAROKOV, A.A.; KULIKOVA, Yu.M.

Effect of passive immunization on the sensitizing action of
the Hemophilus pertussis. Report No. 3: Formation of increased
sensitivity to histamine. Zhur. mikrobiol., epid. i immun. 4:
no. 7:99-103 Jl '65. (MIRA 18:11)

1. Moskovskiy institut epidemiologii i mikrobiologii.

SOLOV'YEV, V.D.; MASTYUKOVA, Yu.N.; SUMAROKOV, A.A.; SARAYEVA, N.T.;
GUTKINA, A.V.

Mechanism of antismallpox immunity. Report No.6 Role of
antigen in the phenomena of specific insusceptibility.
Vop. virus. 10 no.5:583-589 S-0 '65.

(MIRA 18:11)

1. Kafedra virusologii TSentral'nogo institutu usovershenstvovaniya
vrachey i Moskovskiy nauchno-issledovatel'skiy institut epidemi-
logii i mikrobiologii.

SUMAROKOV, A.V.

Electrocardiogram in myocardial infarctions. Sovet.med. no.4:18-22
Apr 51. (CIML 20:8)

1. Of the First Therapeutic Clinic of Moscow Oblast Scientific-
Research Clinical Institute (Director--Prof. Ye.M. Tareyev, Active
Member of the Academy of Medical Sciences USSR).

1. DEFTN, A. A. : SUMARCKOV, A. V.

2. USSR (600)

4. Heart - Hydatids

7. Electrocardiographic changes in cardiac echinococcosis. Sov. med. 16 no. 10, 1952

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

1. SUMAROKOV, A. V.
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4. Kidneys
7. Stenosal atherosclerosis of the renal arteries.
Sov. med., 16 No. 11 1952.

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SURAKHIN, A. V.

"Clinicocardiographic and Plethysmographic Data on Various Stages and Forms of Hypertension." Sani Med Sci, First Medical Inst, Moscow, 1951. (RMFBiel, No 1, Sep 54)

SC: Ser 432, 29 Mar 55

SUKHININ, Pavel Leonidovich, professor; SUMAROKOV, A.V., redaktor;
YEVDOKIMOVA, Z.N., tekhnicheskiy redaktor

[Endocarditis in the puerperal period; clinical aspects, diagnosis,
therapy, and prophylaxis] Endokardity puerperal'nogo perioda;
klinika, diagnostika, terapiia i profilaktika. Moskva, Gos. izd-vo
med. lit-ry, 1956, 193 p.
(ENDOCARDITIS) (PUERPERIUM)

RACERETA MEDICA Sec 6 Vol 13/1 Internal Med. Jan 59

124. EFFECT OF IMPAIRED CORONARY CIRCULATION ON THE ECG IN HYPERTENSIVE DISEASE (russian text) - Sumarokov A.V. - TRUD.J MOSK.MED.INST. 1956, 1 (92-101)

A study was made of the distinctive features of the ECG dynamics in hypertensive disease associated with coronary atherosclerosis. The latter not only distorts the so-called 'hypertensive ECG' but may also contribute to its appearance or even evoke it. In the presence of an ischaemic area in the anterior wall the largest deflections are the T waves in the CR2-CR4 leads, as seen in hypertensive disease, and not in the CR5-CR6 leads. Sometimes these changes precede myocardial infarction. In some cases of myocardial infarction, even with the formation of aneurysm, only the terminal part of the ventricular complex undergoes a change, so that final conclusions as to the nature of impaired coronary circulation require consideration of all the clinical data. -(S)

SUVAROKOV, A.V., kandidat meditsinskikh nauk

Some practical questions in the treatment of cardiac infarct in
the acute state. Sov.med. 21 no.1:55-59 Ja '57. (MLRA 10:6)

1. Iz kafedry propedevticheskoy i gospital'noy terapii (zav. -
deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR prof. Ye.M.
Tareyev) sanitarno-gigiyenicheskogo fakul'teta I Moskovskogo ordena
Lenina meditsinskogo instituta imeni I.M.Sechenova.

(MYOCARDIAL INFARCT, ther.
in acute state)

SUMAROKOV, A.V., kand.med.nauk

Clinical picture of malignant forms of hypertension. Sov.med.
22 no.4:65-74 Ap '58 (MIRA 11:7)

1. Is kliniki obshchey i gospital'noy terapii (dir. - deystvitel'nyy cheln AMN SSSR prof. Ye.M. Tarayev) I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M. Sechenova.
(HYPERTENSION, manifest.
clin. manifest. of malignant hypertension (Rus))

SUMAROKOV, A.V. (Moskva)

Disorder of the excitability function of the heart at late periods
after experimental myocardial infarct in dogs. Pat.fisiol. i eksp.
terap. 3 no.6:26-30 N-D '59. (MIRA 13:3)

1. Iz kafedry propedevticheskoy i gospital'noy terapii (zaveduyushchiy -
deystvitel'nyy chlen AMN SSSR prof. Ye.M. Tareyev) sanitarno-gigiyeni-
cheskogo fakul'teta i TSentral'noy nauchno-issledovatel'skoy laboratorii
i Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M. Sachenova.
(MYOCARDIAL INFARCT exper.)

NIKULENKO, N.M.; SUMAROKOV, A.V.

Reflex changes in the plethysmogram in hypertension and diffuse
nephritis. Vrach.delo no.7:691-693 J1 '59. (MIRA 12:12)

1. Klinicheskaya gruppa Instituta terapii AMN SSSR pri deystvidel'-
nom Chlene AMN SSSR prof. Ye.M. Tareyeva, i kafedra obshchey i gos-
pital'noy terapii (zav. - prof. Ye.M. Tareyev) sanitarno-gigiyeniche-
skogo fakul'teta Pervogo Moskovskogo meditsinskogo instituta im. I.M.
Sechenova.

(HYPERTENSION) (KIDNEYS--DISEASES) (PLETHYSMOGRAPHY)

SUMAROKOV, A.V.

Cardiac arrhythmia in neuroses. Sov.med. 23 no.7:19-29
J1 '59. (MIREA 12:11)

1. Iz kafedry propedevticheskoy i gospital'noy terapii (zav. -
deystvitel'nyy chlen AMN SSSR prof. Ye.M.Tareyev) sanitarno-
gigiyenicheskogo facul'teta I Moskovskogo ordena Lenina
meditsinskogo instituta imeni I.M.Sechenova.
(NEUROSES complications)
(ARRHYTHMIA complications)

"APPROVED FOR RELEASE: 08/26/2000

CIA-RDP86-00513R001653910018-7

SUMAROKOV, A.V. (Moskva)

Hypertension. Fel'd.i akush. 25 no.2:16-21 p '60. (MIRA 13:5)
(HYPERTENSION)

APPROVED FOR RELEASE: 08/26/2000

CIA-RDP86-00513R001653910018-7"

SUMAROKOV, A.V.; MIKHAILOV, A.A.

[Practical analysis of electrocardiograms] Prakticheskii
analiz elektrokardiogramm. Moskva, Medgiz, 1961. 193 p.
(MIRA 14:11)

(ELECTROCARDIOGRAPHY)

SUMAROKOV, A.V.

Resochin in a paroxysmal form of fibrillation arrhythmia and extrasystole. Sov.med. 25 no.4:131-133 Ap '61. (MIRA 14:6)

1. Iz kafedry propedevticheskoy i gospital'noy terapii (zav. - deystvitel'nyy chlen AMN SSSR prof. Ye.M.Tareyev) sanitarno-gigiyenicheskogo fakul'teta I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M.Sechenova.
(QUINOLINE) (ARRHYTHMIA)

SUMAROKOV, A.V. (Moskva)

Prevention and treatment of rheumatic fever. Fel'd. i akush.
(MIRA 14:12)
2 no.12:3-5 D '61.
(RHEUMATIC FEVER)

ANDROSOVA, S.O.; APROSINA, Z.G.; BEZRODNYKH, A.A.; VERMEL', A.Ye.;
VINOGRADOVA, O.M.; LEVITSKIY, E.R.; MAKARENKO, I.I.;
MAKSHANOV, D.A.; POLYANTSEVA, L.R.; SIMAROKOV, A.V.,
SHATALOV, N.N.; SHAPIRO, L.A.; TAREYEV, Ye.M., dir.,
red.; MEL'NIKOV, Ye.B., red.

[Occupational diseases] Professional'nye bolezni; ucheb-
nos posobie dlja studentov sanitarno-gigienicheskikh fa-
kul'tetov. Pod red. E.M.Tareeva. Moskva, 1963 p. 223 p.
(MIRA 16:6)
1. Moscow. Pervyy meditsinskiy institut. 2. AMN SSSR (for
Tareyev).
(OCCUPATIONAL DISEASES)

SUMAROKOV, A.V.; LEVITSKIY, E.R.; MIKHAYLOV, A.A.

Characteristics of the phonocardiogram in extrasystole and
cardiac fibrillation. Sov. med. 27 no.1:14-19 Ja '64.
(MIRA 17:12)

1. Kafedra terapii (zav.- deyствител'nyy chlen AMN SSSR prof.
Ye.M. Tareyev) sanitarno-gigiyenicheskogo fakul'teta I
Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M.
Sechenova i 24-y Gorodskoy klinicheskoy bol'nitsy (glavnnyy
vrach V.P. Uspenskiy).

MANUKHIN, B.N.; SUMAROKOV, A.V.

Catechol amines in the myocardium of patients with congenital heart defect. Pat. fiziol. i eksp. terap. 8 no.1:49-52 Ja-F '64.
(MIRA 18:2)

1. Laboratoriya obshchey i srovnitel'noy fiziologii imeni Kh.S. Koshtoyantsa (zav. doktor biolog. nauk T.M. Turpayev) Instituta morfologii zhivotnykh imeni Severtsova AN SSSR, i kafedra propedevticheskoy i professional'noy terapii sanitarno-gigiyenicheskogo fakul'teta (zav.. deystvit'nyy chlen AMN SSSR prof. B.V. Petrovskiy) I Moskovskogo ordena Lenina meditsinskogo instituta imeni Sechenova.

KRIKUNCHIK, A.P., inzh.; LOPSHITS, L.M., inzh.; LOGANSON, N.Ye., inzh.; SUMAROKOV,
B.P., inzh.; KUDRYASHOV, S.A., inzh.

Distribution system of 6-10 kv. with reactors on the external connectors.
Elek. sta. 29 no.10:79-83 0 58. (MIRA 11:11)

1. Teploelektroproyekt. (for Krikunchik, Lopshits). 2. Promenergoprojekt
(for Loganson, Sumarokov). 3. Knybyshevskoye otdeleniye Elektoroprojekta
(for Kudryashov).
(Electric power distribution)

SUMAROKOV, B.P., inzh.

In reference to the article "Designs for electric GRU connections
and elements on 6-10 kv. for high-capacity steam power plants."
(MIRA 11:12)
Elek.sta. 29 no.11:89 N '58.
(Steam power plants)

SUMAROKOV, G.V.

Dynamics of radiation injury of grain weevils under different conditions of irradiation [with summary in English]. Biofizika 3:
no.3:374-376 '58
(MIRA 11:6)

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo
universiteta im. M.V. Lomonosova.
(GAMMA RAYS--PHYSIOLOGICAL EFFECT)
(WEEVILS)

SUMYATOV, G. V.

Correlation Between the Redox Potential of the Haemolymph of Crickets During Irradiation and Radiosensitivity

G. V. Sumyatov

A macromethod has been developed to determine the redox potential of the haemolymph of insects *in vivo*. The effect of various protective factors (hypoxia, protective substances) which influence the radiosensitivity of insects has been investigated.

Uncorrelated differences in the values of the redox potential have been observed for solutions of protective substances and for tissues into which protective substances had been introduced. On the other hand, when protective substances are introduced into the organism during hypoxia, the values of the redox potential exactly correlate with the magnitude of the protective effect and radiosensitivity. The data reported in the literature which failed to show such correlation were obtained when the potential was measured *in vitro* and did not allow for the redistribution of the rates of oxidation-reduction reactions in living systems, altered by the protective effects.

Lomonosov State University, Moscow, USSR

(4)
Direct and Indirect Radiation Damage to the Cell Nucleus

N. P. Dubkin, R. N. Sidorov and N. N. Sokolov

It is known that molecules in aqueous solution can undergo radiochemical reactions due to free radicals from the radiolysis of water, or by direct energy absorption.

The genetic effectiveness of free radicals produced chemically within the cell (Fenton reaction, reaction of ascorbic acid with hydrogen peroxide) allows us to assess the importance of the direct and indirect radiation effects on chromosomes. It was shown in plant cells (rootlets of *Allium fistulosum*) that substances which protect the chromosomes from the effect of the free radicals OH and H₂O₂ obtained chemically (K, KB, hyposulfite, etc.) are not protective when the chromosomes are irradiated with X-rays. We conclude that the genetic effect of radiation is due mainly to the direct effect and not to the products of water radiolysis.

Parallel experiments with DNA solutions (M. I. Mekshenkov) showed that the effectiveness of the direct action on DNA is much greater than that of the indirect effect.

The considerable protective ability of substances which protect chromosomes from free radicals was demonstrated in solutions of DNA only at low DNA concentrations. In solutions with high DNA concentrations the protective effect is virtually absent which points to the predominant role of the direct effect.

Institute of Biophysics, Academy of Sciences of the USSR, Moscow

report presented at the 2nd Intl. Congress of Radiation Research,
Harrogate/Yorkshire, Gt. Brit. 5-11 Aug 1962

L 25744-65 INT(d)/EXP(1)/ED-2 Pa-4/Pq-4/Pg-4/Pk-4 LP(c) BR/CG

ACCESSION NR: AP5002087

S/0145/64/007/006/0048/0053

43
28
6

AUTHOR: Popov, Yu. A.; Sumarokov, L. N.; Khetagurov, Ya. A.

TITLE: Matrix methods of speeding-up arithmetical operations in a digital computer

160

SOURCE: IVUZ. Priborostroyeniye, v. 7, no. 6, 1964, 48-53

TOPIC TAGS: digital computer, arithmetical operation

ABSTRACT: Two matrix methods for speeding-up the multiplication operation are described in which the amount of equipment is proportional to the square of the number of digits m of the cofactors. The first method — a modification of the carry-storage method — includes a "complete" matrix of m^2 functional adders. In practice, the amount of equipment required can be considerably cut by (a) eliminating the adders that receive only one signal and the adders that correspond to lower-order $m-k$ digits of the $2m$ -digit product (k being the number

Card 1/2

L 25744-65

ACCESSION NR: AP5002087

of buffer digits required to round off the product) and (b) using improved logical circuits. This method also permits the summation of numbers. The second method — a modification of the first — is based on conversion of the multirow product code into a two-row code, and then — by means of a parallel adder — into a single-row code. Formulas for determining the amount of equipment are supplied. Orig. art. has: 3 figures and 18 formulas.

ASSOCIATION: Moskovskiy inzhenerno-fizicheskiy institut (Moscow Engineering and Physics Institute)

SUBMITTED: 10Mar44

ENCL: 00

SUB CODE: DP

NO REF SOV: 003

OTHER: 000

Card 2/2

L42038-65 ENT(d)/EED-2/SWP(1) Pg-4/Pk-4/Pq-4 LJP(c) GG/EE

UR/0286/65/000/007/0132/0132

ACCESSION NR: AP5010950

AUTHORS: Sumarokov, L. N.; Popov, Yu. A.

26

TITLE: Matrix device for multiplication and addition. Class 42, No. 169881

B

SOURCE: Byulleten' izobreteniij i tovarnykh znakov, no. 7, 1965, 132

TOPIC TAGS: multiplier circuit, sumator

ABSTRACT: This Author Certificate presents a matrix device for multiplication and addition containing functional semisumulators. To speed the multiplication operation the semisumulator "sum" output of the i-th digit of the j-th line of the semisumulators is connected to one of the semisumulator inputs of the i-th digit of the j + 1-st line. The semisumulator "transfer" output of the i-th digit of the j-th line is connected to the semisumulator inputs of the i + 1-st digit of the j + i-st and j + 2-nd lines (for j odd) and to the inputs of the i + 1-st digit of the j + 1-st line (for j even).

ASSOCIATION: none

SUBMITTED: 03Jul63

ENCL: 00

SUB CODE: DF, EG

NO REF Sov: 000

OTHER: 000

Card 1/1 (pt)

L 62033-65

ACCESSION NR: AP5010955

UR/0286/65/000/001/0133/0134

AUTHORS: Sumarokov, L. N.; Popov, Yu. A.; Suslov, R. M.

5
B

TITLE: Parallel summator. Class 42, No. 169886

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 7, 1965, 133-134

TOPIC TAGS: summator

ABSTRACT: This Author Certificate presents a parallel summator (see Fig. 1 on the right). To reduce the summation time, it contains a transfer network in two groups, each consisting of two transfer lines. The summator digits corresponding to these groups, which are necessary for performing the digital operations under the stored codes, are connected to the transfer lines. The number of codes in the lines for each group corresponds to the cases of the presence and absence of the transfer signal into the lowest digit of this group. The leading digits of the transfer lines of all groups are connected to the inputs of logic circuits for code selection of the corresponding transfer line of the following group. Orig. art. has: 1 diagram.

ASSOCIATION: none

Card 1/3

SEARCHED.....
INDEXED.....
SERIALIZED.....
FILED.....

POPOV, Yu.A.; SUMAROKOV, L.Y.; KHETAGUROV, Ya.A.

Matrix methods for accelerating arithmetic operations in a digital computer. Izv.vys.ucheb.zav.; prib. 7 no.6:48-53 '64.

(MIRA 18:2)

1. Moskovskiy inzhenerno-fizicheskiy institut. Rekomendovana kafedroy universal'nykh vychislitel'nykh mashin.

S/146/62/005/002/004/004
D201/D307

13,2520

AUTHORS:

Pel'por, D.S. and Sumarokov, N.P.

TITLE:

The motion of a three-axial gyroscopic stabilizer
on a rolling base

PERIODICAL:

Izvestiya vysshikh uchebnykh zavedeniy. Priboros-
troyeniye, v. 5, no. 2, 1962, 100 - 108

TEXT:

The authors briefly consider the effect of the Cardan frame inertia, frictional moments in the platform stabilization axes and of other moments at the motion of a three-axial gyro-stabilizer in an aircraft. It is shown that when the aircraft is rolling around along its longitudinal axis, the stabilizer platform undergoes displacements due to the inertia of the Cardan suspension frame, to the inertia of the motor rotors and damping in the Cardan stabilizer axes. The roll of the aircraft induces in gyroscopic stabilizers with external Cardan a displacement moment from the inertia of suspension frame which acts with respect to the external axis and may reach a considerable value,

Card 1/2

VB

The motion of a three-axial ...

S/146/62/005/002/004/004
D201/D307

far exceeding the remaining forces. Under certain achievable assumptions the free movement of the stabilizer platform with respect to every Cardan axis may be considered to be independent if the aircraft retains its absolute position in space. When the aircraft oscillates harmonically around its longitudinal axis, the stabilizer platform undergoes precession, whose free velocity depends on the respective phases of the platform oscillations with respect to the rectangular coordinate axes in space. Finally equations are derived which make it possible to determine the basic parameters of the stabilizer for determining the quality of stabilization of its platform in space. There are 2 figures.

ASSOCIATION: Moskovskoye vyssheye tekhnicheskoye uchilishche im.
N.E. Baumana (Higher Moscow Technical School im. N.E.
Bauman)

SUBMITTED: September 26, 1961

Card 2/2

ALL'FOR, Dmitrij Sergeyevich. Prinimalj iuchastiye: KOLOSOV,
I.A., kand. tekhn. nauk; SUMAROKOV, N.P., aspirant;
TSHELINSKIY, A.Yu., akademik, ratsenzent; MIKHALEV,
I.A., kand. tekhn. nauk, prof., nauchn. red.;
SUVCROVA, I.A., red.

[Theory of gyroscopic stabilizers] Teoriia giroskopicheskikh stabilizatorov. Moskva, Mashinostroenie, 1965. 347 p.
(MIRA 18:12)

Сборник изобретений и
ЧЕРВЯКОВ, Федор Иванович; СУМАРОКОВ, Николай Васильевич; РУСАКОВ, С.И.,
канд.техн.наук, редактор; МАРАКУШЕВ, Я.А., канд.техн.наук,
ред.; КОЧЕТОВА, О.П., научный ред.; ЕЛ'КИНД, В.Д., техн.ред.

[Sewing machines] Shveinye mashiny. Moskva, Gos. nauchno-tehn.
izd-vo mashinostroit. lit-ry, 1957. 270 p. (MIRA 11:5)
(Sewing machines)

CHERVYAKOV, Fedor Ivanovich; SUMAROKOV, Nikolay Vasil'yevich; RUSAKOV,
S.I., kand. tekhn. nauk, retsentent; TOIROVA, A.L., red. izd-
va; CHERNOVA, Z.I., tekhn. red.; UVAROVA, A.F., tekhn. red.

[Sewing machines] Shveiniye mashiny. 2. izd. perer. i dop.
Moskva, Mashgiz, 1962. 467 p. (MIRA 15:3)
(Sewing machines)

SOV/81-59-14-49943

Translation from: Referativnyy zhurnal, Khimiya, 1959, Nr 14, p 283 (USSR)

AUTHORS: Busalayeva, Ye.N., Sumarokov, N.V.

TITLE: From an Experiment on Eliminating Scaling of the Surface of Parts in
Nitriding

PERIODICAL: Prom.-ekon. byul. Sovnarkhoz Permsk. ekon. adm. r-na, 1958, Nr 9,
pp 11 - 13

ABSTRACT: The investigation of the microstructure of nitrided parts of St. EI-69,
the surface layer of which was subjected to scaling, has shown that the
grains of austenite in the above-mentioned steels have an angular elongated
form in the direction of rolling, consertal properties according to size
are detected in the parts, as well as a strong etching of the grain edges.
This testifies to the non-uniform deformation of steel during rolling,
which combines with stress during nitriding so as to cause the appearance
of microcracks on the grain boundaries. The latter are the cause of
scaling. Experiments were made on the change in the structure of parts
to be nitrided by tempering with subsequent normalization and nitriding,
after which scaling was not observed.

Card 1/1

R. Salem

SUMAROV, N.V.; POPOV, G.I., otv. za vypusk

[New cementation processes; collected articles] Novaia
tekhnologija tsementatsii; sbornik statei. Perm',
TsBTI Soveta narodnogo khoz. Permskogo ekon.administra-
tivnogo raiona, 1959. 123 p. (MIRA 14:4)

1. Permskoye oblastnoye nauchno-tehnicheskoye obshchestvo
mashinostroitel'noy prosyshlennosti.
(Cementation (Metallurgy))

8/123/62/000/015/007/013
A052/A101

AUTHORS: Sumarokov, N. V., Taskayev, I. P.

TITLE: Case hardening of chromium stainless steels in a solid carbonizer

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 15, 1962, 19 - 20,
abstract 15B123 ("Uch. zap. Permsk. un-t", 16, no. 4, 1960, 27 - 32)

TEXT: Experiments on case hardening (at 950 - 1,050°C) were carried out on 1X13 (1Kh13) and X17H2 (Kh17N2) stainless steel samples. Ammonium chloride was added to the charcoal carbonizer and the samples were parkerized preliminarily in a zinc phosphate solution bath. After case hardening the microstructure of the case-hardened layer and its hardness (in all processes of more than 1 hour duration, HRC = 59 - 63) were investigated. As a result of the investigation the possibility of case hardening chromium stainless steels with 13 and 17% Cr in a solid carbonizer with a preliminary parkerization of the surface was established. Furthermore, it has been shown that the decrease of hardness of the case-hardened layer below HRC 58 is connected with the disappearance of excess carbides and with a decrease of the carbon content (below 0.4 - 0.6%) in the mar-

Card 1/2

S/123/62/000/015/007/013
A052/A101

Case hardening of...

tensile of the case-hardened layer and that the carbon limit solubility in the austenite of Kh17N2 steel at 1,020 - 1,050°C is 0.4 - 0.6%. There are 2 graphs and 2 diagrams.

[Abstracter's note: Complete translation]

Card 2/2

S/137/62/000/006/147/163
A057/A101

AUTHOR: Sumarokov, N. V.

TITLE: Liquid cyanidation of stainless chromium steels

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 6, 1962, 107, abstract 61678
("Uch. zap. Permsk. un-t", 1960, v. 16, no. 4, 33 - 51)

TEXT: Cyanidation of steel of the types 1X17 (1Kh17), 1X13 (1Kh13),
2X13 (2Kh13), and X17H2 (Kh17N2) was carried out in a $\text{Ca}(\text{CN})_2$ -base bath. The
composition of the neutral part of the bath was (in %): KCl 41, NaCl 37, BaCl_2
22, temperature of cyanidation $820 - 960^\circ\text{C}$, duration 1 - 10 hrs. After cyanida-
tion the samples were cooled in air, and then investigated metallographically.
The investigations demonstrated the possibility of preparation of hard surface
layers on stainless Cr-steel by cyanidation in liquid $\text{Ca}(\text{CN})_2$ baths. An increase
in the content of carbon in the steel increases somewhat the depth of the cyani-
dation layer and an increase of Ni and Cr decreases the depth. After cyanidation
the samples were treated thermally in the following way: 1) hardening by heating
in the salt bath up to 1050°C , holding time 2 hrs, cooling in oil; 2) cold treat-

Card 1/2